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ABSTRACT

The Executive Management Leadership Institute (EMLI) is a comprehensive sequence of modules designed to support development of administrators in the North Carolina Community College System. As part of the EMLI, participants complete a project demonstrating skill in applying research to the tasks of administration. This report presents three research papers completed by graduates of the EMLI program. The first paper, "An Analysis of the Career Paths of Mid-Atlantic Community College Presidents," by Kenneth Arnold Boham, describes a survey of 98 community college presidents to determine the perceived strategies by which individuals became presidents and any relationships between these strategies and selected socio-economic, familial, career record, and socio-psychological traits. Next, "Outcomes-Based and Results-Oriented Budgeting: A Case Study in a Small Rural Community College," by Loretta M. Church, describes a study conducted at Mayland Community College, in North Carolina, in which special budget allocations for developmental instruction, counseling, and educational assessment and placement were shown to have no impact on the academic persistence of developmental students. Finally, "The Effectiveness of College Orientation as Taught at Four North Carolina Community Colleges," by Matthew S. Garrett, presents results of a study comparing 87 pairs of first-time, degree-seeking two-year college students, concluding that the college orientation course had a positive impact on participants' retention and grade point averages. References for each paper are included. (PAA)

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EMLI

EXECUTIVE MANAGEMENT LEADERSHIP INSTITUTE

RESEARCH RESULTS VOLUME I

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North Carolina Department of Community Colleges

September 1992

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EXECUTIVE MANAGEMENT LEADERSHIP INSTITUTE

RESEARCH RESULTS

VOLUME I, SEPTEMBER, 1992

AN ANALYSIS OF THE CAREER PATHS OF MID-ATLANTIC COMMUNITY COLLEGE PRESIDENTS
by Dr. Kenneth Boham
Wake Technical Community College

OUTCOMES-BASED AND RESULTS-ORIENTED BUDGETING: A CASE STUDY IN A SMALL RURAL COMMUNITY COLLEGE
by Dr. Loretta M. Church
Mayland Community College

THE EFFECTIVENESS OF COLLEGE ORIENTATION AS TAUGHT AT FOUR NORTH CAROLINA COMMUNITY COLLEGES
by Dr. Matthew Garrett
Central Carolina Community College

Submitted in Fulfillment of the Requirements of Component Six
North Carolina Community College System
Executive Management Leadership Institute

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PREFACE

The Executive Management Leadership Institute (EMLI) is a comprehensive sequence of modules designed to support development of the next generation of first-line leaders for the North Carolina Community College System. Its participants are carefully selected for their ability, demonstrated effectiveness and interest in leadership roles. EMLI is designed to provide participants the opportunity to gain the knowledge, skill and competence to develop their capabilities for providing the leadership necessary for meeting the challenges of the future.

The components of EMLI are:

1) Orientation to Community College Leadership
2) Advanced Management Applications
3) Current Issues in Community College Management
4) On-the-Job/Practical Experiences
5) Preparation Through Graduate Studies
6) Conceptual Exercise and Experiences

COMPONENT SIX: CONCEPTUAL EXERCISE AND EXPERIENCES

Leaders of the future will need to have the skills which enable them to continually monitor changes in theory, technology and systems so that they can apply new ideas, tools and methodologies to their roles in the community colleges. As part of the Executive Management Leadership Institute (EMLI) program, each participant must complete a project which demonstrates skill in applying research to the tasks of administration and/or leadership.

Research projects may use any quantitative or qualitative research methodology reflecting an experimental, quasi-experimental, correlational, descriptive or case study research design. The project must be relevant to community college instruction, administration or policy-making.

The papers presented here are the work of the first group of graduates of the EMLI program.

AN ANALYSIS OF THE CAREER PATHS OF MID-ATLANTIC COMMUNITY COLLEGE PRESIDENTS

by

Kenneth Arnold Boham, Ed.D.

The final report submitted to the Executive Management Leadership Institute - Department of Community Colleges in partial fulfillment of the requirements for completion

1992

ABSTRACT

The purpose of this study was to determine (1) the perceived strategies by which individuals became president (chief executive officer) of a mid-Atlantic area community college and (2) any relationships between those perceived strategies and selected socio-demographic, familial, career record and socio-psychological factors.

The socio-demographic factors included were age, gender, race, marital status, type of degree and discipline of degree. Familial factors included education of parents, occupation of parents, employment status of spouse, occupation of spouse and size of household. Two career record factors were selected ideal time in other administrative positions and previous professional positions. Four socio-psychological factors included were physical self-concept, internal-external control, time orientation and presidential image.

A mailed survey instrument was used to obtain information from all community college presidents in North Carolina, Virginia, and Maryland. Of the 98 instruments mailed, 62 were returned, resulting in a response rate of 63.2 percent--42 of the 58 North Carolina president, 13 of the 23 Virginia presidents and 7 of the 17 Maryland presidents.

Five hypotheses were tested in the study utilizing Chi-square statistics.

TABLE OF CONTENTS

	Page
INTRODUCTION	1
Purpose of the Study	2
Research Problem Statement	3
Background Information	4
Significance of the Study	7
Limitations of the Study	7
CONCEPTUAL FRAMEWORK AND HYPOTHESES	9
Conceptual Schema	9
Research Hypotheses	10
METHODOLOGY	11
Research Design	11
Population	11
Instrumentation	11
FINDINGS	12
Summary of Findings	12
CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS	13
Conclusions	13
Implications	16
Recommendations	17
BIBLIOGRAPHY	18

INTRODUCTION

The top administrative position at a community college is a highly sought-after position, and competition for the president's position can be quite fierce. In recent years, the process of preparing for the top community college administrative position has intrigued a number of researchers. For example, Phail Wynn, President of Durham Technical and Community College, speaking of "The Role of the Community College President: Implications for Preparing to Become a President," addressed the significance of: (1) graduate programs, (2) self-directed lifelong learning, (3) self-directed development, and (4) maximizing opportunities in preparation for a perceived career objective as president of a community college. At the University of Virginia Center for the Study of Higher Education, June 19-21, 1986, a workshop entitled "Pathways to the Presidency" was conducted for participants that focused on (1) avenues to the presidency, (2) leadership attributes and skills required of the president, and (3) other concerns for the development of future presidents. The central theme of the workshop concentrated on helpful strategies in pursuing and securing the chief administrative position at community colleges.

According to Pray (1975), community college presidents live in a sort of no man's land somewhere between the problems and responsibilities of a superintendent of schools and those of the president of a four-year institution. The school superintendency is a long-established profession with adequate literature available as guidance. According to Pray (1975), books on college presidency positions are available, and conferences on the function are held regularly, but they are written by and are programmed mostly for presidents of four-year colleges and universities. To the extent that he assumes the style of the presidency of a more conventional or traditional college or university, the community college president shuts himself away from the kind of thinking, philosophy and involvement which reflect the special nature of his institution. Part of the difficulty, indeed, is that there is no widespread consensus on the leadership style, behavior, and problems of administration of community college presidents which would enhance their chances of success in that leadership position.

Pray (1975) stated that the task of being president of a community college has great potential for both satisfaction and frustration. The potential for satisfaction is somewhat different from that available to other traditional college and university presidents, and the potential for frustration is greater than that encountered, as a rule, by heads of more traditional institutions because of the conditions which offer the potential for satisfaction and because of the community college structure and tradition which may create unusual problems of governance.

Ferrari (1970) stated that motivations underlying career choice are complex and often subtle in their origin, intensity, and effects. Sometimes they seem very reasonable and clear and at other times slightly irrational and vague. Sometimes they seem to be fully and carefully made, but often they are rooted in the subconscious. According to Ferrari (1970, pp. 133-134), in society,

> an individual's occupation often has great meanings which not only reflect his interests and abilities, but often his values and commitments. An occupation offers a level or position of status and security and provides an essential part of how a man defines who he is.

The relevant literature would suggest that career choices are not easily or simply made, nor are they based upon easily explainable motives. To ask someone to explain his career choices, and to expect an exact picture, is fraught with uncertainty. He may not really know, and even if he does, he may for various reasons attempt to conceal his motivations. Accidental factors, subconscious forces, social influences, psychological elements, and decision-making over time have all been found to be important in different occupational choices or selections for a variety of career patterns. According to Payne (1980, pp. 1-2):

> individuals who choose to plan their own career destinies are aware of self-interests and self-potentialities. This awareness is necessary in devising career goals that are appropriate to one's self concept. Construction of problem-solving or problem-preventing strategies may be imminent in the course of charting one's career path. A career-minded individual seeks self-fulfillment in career pursuits.

Although career changes are often due to external factors in a person's environment, important changes quite often are found within the personality attributes and psychological drives of the upwardly mobile person. Approaches have also been found which describe the individual's career pattern as an on-going discovery of self and self-expectations, an unconscious and continual development into a more fully functioning human being, or a greater capacity to persist, to act, to achieve power, and so on (Ferrari, 1970).

Cohen and Ganly (1933) stated that the swiftly changing industrial, economic, and social scenes require that one learn what opportunities await them, what problems may be faced, what personal qualifications must be possessed, and what preparation is needed in order to make the most of career opportunities. This theme postulated in 1930 holds true for 1992 and beyond.

Purpose of the Study

The purpose of this study was to determine (1) the perceived strategies by which individuals became presidents (chief executive officers) of community colleges in North Carolina, Virginia, and Maryland and (2) any relationship that may exist between those perceived strategies and selected socio-demographic, familial, career record, and socio-psychological factors. To accomplish this task, a typology of three career strategies developed by Susan Payne (1980, p. 16) was utilized. The typology included: (1) the Loyalist strategy, (2) the Diversifier strategy, and (3) the Affiliator strategy.

The Loyalist may be equated with the Loyal identified by Gouldner--i.e., an individual who places high emphasis on loyalty to the employing institution and low emphasis on commitment to specialized role skills, and who is likely to utilize an inner reference group (Gouldner, 1957, p. 290). The Diversifier may be equated with the Cosmopolitan identified by Alvin Gouldner--i.e., an individual who places low emphasis on loyalty to the employing institution and high emphasis on commitment to specialized role skills, and who is likely to utilize an outer reference group (Gouldner, 1957, p. 290). The Affiliator is one who places high emphasis on sponsorship along with the ability to be in the right place at the right time. The Affiliator values high visibility, relationships with "significant others" and external relationships (Payne, 1980, pp. 36-37).

This study examined factors from four categories which were thought to influence the adoption of a specific perceived career strategy, namely: (1) socio-demographic, (2) familial, (3) career record, and (4) socio-psychological. The review of literature revealed some insight with regard to the relevance of these factors to the adoption of perceived career strategies. Recommendations by current presidents on strategies they utilized may provide further insight and assist in the development of perceived career strategies for those who aspire to the position.

Research Problem Statement

Individuals utilize many strategies, techniques, and methods to achieve their career objectives. Educational preparation, formal training, professional work experience and years of service are some of the methods that may be utilized. Personal attitudes, attributes, and even environmental circumstances--not to mention luck--may account for the fruition of one's career objectives.

The research problem investigated was an analysis of the perceived career paths through which individuals become community college presidents. The career strategies examined included: (1) Loyalist strategy--a career plan typifying the individual who values longevity and seniority within a chosen organization (Payne, 1980); (2) Diversifier strategy--a career plan capitalizing on efforts resulting in high frequency mobility, as well as an extensive range of career experiences and qualifications; and (3) Affiliator strategy -the career plan which involves attributes of identification with an external group of "significant others." The Affiliator is typified by a continued state of career readiness in order to mobilize resources at an opportune moment.

Specifically, the following three research questions were formulated to guide the study:

1. Were there specific perceived career strategies utilized by community college presidents to attain their present leadership position?

2. Were certain selected socio-demographic, familial, career record, and socio-psychological factors related to presidents' perceived career strategies?

3. Is there any relationship between socio-psychological factors and perceived career strategies when the other independent variables are controlled?

Background Information

The selection of a satisfying occupation is enmeshed in a process which seems to be relatively simple for some and very difficult for others. Social scientists have long recognized the importance of factors such as family influences, level of formal education, and geographic location in the formation of values and attitudes about the world of work and careers (Ferrari, 1970, p. 113).

A discussion of the topic of occupational preparation, selection or career motivation brings to mind some philosophies and theories that may help explain why people select or find themselves in the occupation they do. Ferrari (1970, pp. 114-116) stated four theories:

1. The Accident Theory: advocates of this school of thought usually stress the idea that individuals make decisions about future occupations accidentally, and it is therefore impossible to critically evaluate all the alternative factors.

2. Unconscious Forces Theory: the unconscious forces theory had its origins in the early psychological school of human behavior and motivations. Its proponents maintain that the decisions to enter a given occupation are not a result of conscious deliberation, but rather a result of latent forces which influence the individual toward a given occupation.

3. Psychological Theories: advocates of psychological theories hold that, "while the limits and pressures of uncontrollable external circumstances play a part, general psychological factors -- are of major casual importance. The psychological factors often emphasize the role impulsive emotions and the satisfaction of basic need in addition to economic gains. Many researchers and writers have postulated a needs hierarchy beginning with physical and safety needs and moving upward to self-actualization needs.

4. Developmental Theories: these theories stress that the final occupational choice can be understood only in terms of the stages of development through which an individual has passed. As such, occupational choice is a developmental process, a series of decisions over a period of years that are largely irreversible and end in a compromise.

It is not the purpose here to discuss the merits and limitations of each of these approaches and theories; they have been set forth merely to show that the process of choosing any given position is a complex and weighty task, subject to a variety of interpretations.

American lifestyles and value systems are going through some changes that have a profound effect on careers. More importantly, the changes are opening up opportunities for individuals to reap the rewards of an effective career strategy. Because most of our basic needs are being satisfied, people in our society are experiencing greater opportunities to seek "the better life." They are becoming more concerned with striving for a kind of career that permits them to be themselves, "to do their thing." They seek jobs that respond to their interests, values, and needs; they express disenchantment with jobs that do not provide opportunities for growth and for using their own resources. If they cannot receive satisfaction on the job, they would be willing to move or to do things off the job that support their growth need. Opportunities can be grasped only when they are perceived, and they are perceived within a context of knowing what is wanted and how to go about acquiring it (Souerwine, 1978, pp. 7-8).

Souerwine (1978, pp. 11-15) set forth several rationales for planning individual change when it comes to careers:

1. Individuals change best when the motivation for change comes from within the person rather than from outside. Psychologists use the term "internalized motive" to refer to that inside motive; "externalized motive" is used to refer to those outside.

2. Individuals change best when their objectives are specific rather than general: once there is a specific purpose, change can be seen occurring more readily than when the purpose is general and knowing that the desired change is happening provides considerable personal satisfaction.

3. When people know that they are changing in a desired direction, there is a feeling of satisfaction. That satisfaction provides for heightened self-esteem, and that increase in self-esteem leads to desire for more personal growth.

4. Individuals change best when there is a personal commitment. What is becoming apparent is that individuals don't change in a vacuum. They need feedback. The more specific that feedback is, and the more directly related to one's own behavior and specific personal objectives, the more informative it is; but more than this: it has an emotional characteristic that is lacking when the feedback is more general.

5. Individuals change best when changes are timely and gradual rather than dramatic and revolutionary. Change takes time. Individual change takes patience and time. A career change decided today can usually not be achieved by tomorrow. Most changes require a series of events to occur in some evolving way. Granted, we can help some or all of those events occur; but even then, the magnitude and complexity of career goals demand shifts in attitudes, values, policies, attitudes, values, policies, and procedures--and that takes time and careful planning.

A rationale for the development and implementation of a perceived career strategy is rooted in the changing American scene. First, workers are more educated and knowledgeable concerning options available to them. More people are being exposed to more experiences. Adult and continuing education will increase as people realize the necessity to keep up with technology as well as professional demands. Classes in arts and crafts, music, literature, business, travel, sports, and leisure time activities are being planned as part of the lifestyle for people from all socioeconomic levels (Souerwine, 1978, pp. 3-4).

Second, there is greater concern for achievement through self-actualization. Although it can be said that organizations tend to socialize employees in order for the organization's goals to be accomplished, people and organizations are beginning to see that perhaps both the individual and the organization can be served; it is no longer a matter of one or the other. The concern for full employment is giving way to the need and concern for full living. Society has done much to fulfill the so-called "basic" needs of its members. People now have the options that make achievement imprinted with one's own sense of self more probable (Souerwine, 1978, pp. 4-5).

Third, more people are showing an interest in a series of jobs over a lifetime or in a job with multiple career dimensions. Attitudes are changing with regard to the word "career" and the concept of institutional loyalty until retirement. A scenario of changing positions within an institution or changing job activities with varied responsibilities is becoming prevalent. Flexibility in planning careers is more realistic today than it was a generation ago (Souerwine, 1978, pp. 5-6).

Fourth, there are greater opportunities today for self-expression and openness. The advent of rising entitlements, consumerism, pressure groups, and attempts to shift the power base to serve individual concerns has seen the self-controlled "take it as it is dished out" era move toward its end.

Experiences of renewal can occur during the course of a career. This renewal may serve not only as a means for achieving one's career objectives, but also as a means of revitalizing or renewing the quest for goal attainment. From an organizational (system) viewpoint, staff development is a means of career development. An organization may bring into its system the most competent personnel available and provide a comprehensive and intensive personnel training program, but, unless its members are given an opportunity to function, the organization may lose much of its potential effectiveness (Boone, 1985, p. 86).

An individual who pursues a career may devise a specific plan central to his career objective. This plan may be thought of as a strategy, i.e., a systematic means for determining one's career objective. Persons interested in devising a career strategy utilize a planned or directional approach (path) toward reaching prearranged goals (Payne, 1980).

It is important to see that career strategy has a dynamic quality. It is not something that is formulated once, to be pursued doggedly without regard to experience. Over-dedication to any given strategy without regard to reality may result in lost opportunities (Souerwine, 1978, p. 28). Souerwine (1978, p. 26) stated that:

> However, as one becomes more aware of how one sees himself and how others see him, what his strengths truly are, and what his priorities are in a job and in private life, he becomes more aware of how he gives direction to his life. It is then that he realizes he does not need to let things happen to him. He can make things happen for him. This is the essence of career growth.

Significance of the Study

Since the position of president of a community college is a highly sought-after position and the competition is quite fierce, insight into the career paths of incumbent presidents can be valuable to those who aspire to the chief administrative position. The present study was expected to add to the limited literature available on the community college president. Thus, the study was expected to aid the understanding of those who aspire to become community college presidents by providing information about the utilization of career planning strategies by incumbent presidents and providing a profile of these chief administrative officers with regard to selected socio-demographic, career record, and socio-psychological factors.

Limitations of the Study

Certain limitations of the present study should be recognized. First, the population was limited to all community college presidents in the North Carolina, Virginia, and Maryland state systems of community college education.

A second limitation is inherent in the self-administered questionnaire. Its disadvantages, as pointed out by Bailey (1978), include: (1) lack of flexibility--with no interviewer present, there can be no variation in questions asked and no probing for a more specific answer if the respondent's first answer is too vague or general to be useful. In addition, if the respondent misunderstands the question, he cannot be corrected; (2) low response rate--mailed studies sometimes receive response rates as low as ten percent, and fifty percent is considered "adequate" (Babbie, 1979, p. 165); (3) verbal behavior only--with no interviewer present to observe nonverbal behavior or to make personal assessments concerning the respondent's ethnicity, social class, and other pertinent characteristics; (4) no control over environment--in a mailed questionnaire study, there is no assurance that the respondent will be able to complete the instrument in private without distractions; (5) no control over question order--question order designed to eliminate response bias may be ruined by a respondent who reads the entire

questionnaire before answering, skips some questions, or does not answer questions in the order in which they are presented; (6) many questions may remain unanswered; (7) spontaneous answers cannot be recorded; (8) difficulty in separating bad addresses from nonresponses; (9) no control over date of response--lack of control over the time the questionnaire is completed may damage a study greatly; (10) cannot use complex questionnaire format--the questions must generally be simpler to understand because a complex format with a lot of contingency questions is also probably too confusing for the average respondent (Bailey, 1978, pp. 135-138).

Since career patterns may be considered a longitudinal process, it may also be difficult for respondents to reconstruct factual information describing occurrences in the past.

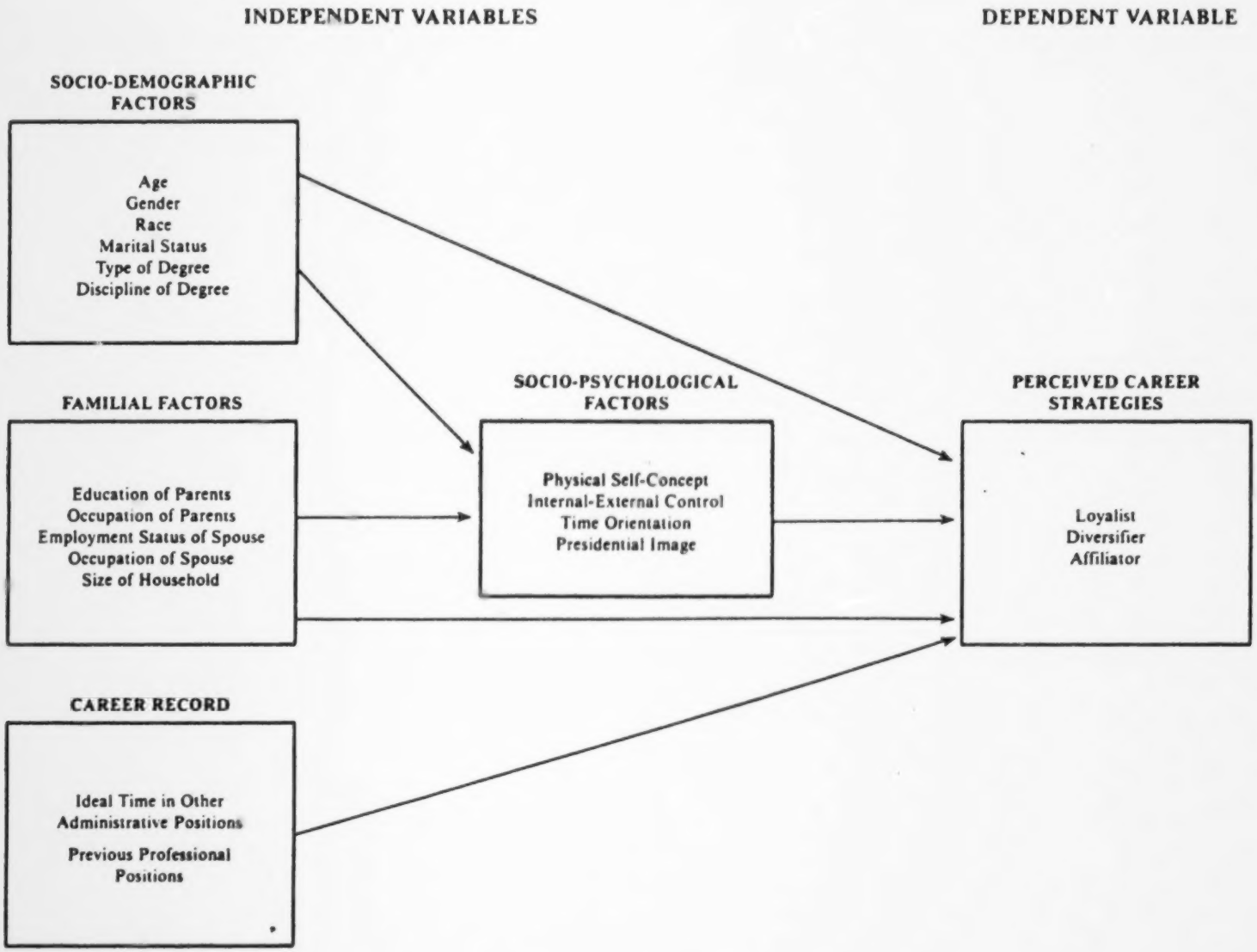

Figure 1. A conceptualization of variables and relationships depicting community college presidents' perception of career strategies utilized.

Research Hypotheses

Based on the conceptual framework generated for this research, its purposes and objectives, and a review of the related literature, the following five null hypotheses were formulated to guide this study:

Hypothesis I: There is no relationship between community college presidents' perceived career strategy for acquiring the position as community college president and the socio-demographic factors of (1) age, (2) gender, (3) race, (4) marital status, (5) type of degree, and (6) discipline degree.

Hypothesis II: There is no relationship between community college presidents' perceived career strategy for acquiring the position as community college president and familial factors of (1) education of parents, (2) occupation of parents, (3) employment status of spouse, (4) occupation of spouse, and (5) size of household.

Hypothesis III: There is no relationship between community college presidents' perceived career strategy for acquiring the position as community college president and career record factors of ideal time in other administrative positions.

Hypothesis IV: There is no relationship in community college presidents' perceived career strategy for acquiring the position as community college president and the socio-psychological factors of (1) physical self-concept, (2) internal-external control, (3) time orientations, and (4) presidential image.

Hypothesis V: There is no relationship between community college presidents' perceived career strategy for acquiring the position as community college president and socio-psychological factors when controlling for other selected socio-demographic factors.

METHODOLOGY

The methods and procedures used in this study were: (1) research design, (2) population, (3) instrumentation, (4) data collection procedure, and (5) measurements of variables.

Research Design

According to Babbie (1979), the survey research design is perhaps the most frequently utilized method of observation in the social sciences. Because of the size of the population and geographical area covered by the states of North Carolina, Virginia, and Maryland, a self-administered mailed questionnaire was utilized, for the following advantages: (1) savings of money and time, (2) respondent convenience, (3) greater assurance of respondent anonymity, (4) standardization, (5) no interviewer bias, (6) securing information, and (7) accessibility (Bailey, 1978).

Population

The total population for this study included all 98 community college presidents in the states of North Carolina, Virginia, and Maryland. The population from the three states consisted of 58 community college presidents in North Carolina, 23 in Virginia, and 17 in Maryland. Questionnaires were returned by 42 of the 58 North Carolina presidents, 13 of the 23 Virginia presidents, and 7 of the 17 Maryland presidents. The total number of questionnaires returned from community college presidents in the three states totaled 62, resulting in a response rate of 63.2 percent.

Instrumentation

The questionnaire utilized for this study was developed by Susan Payne in a 1980 study on "Career Strategies, Planning and Destinies of Presidents of Two-Year Public Postsecondary Institutions in the United States." The instrument was designed to gather information about the career paths of the presidents of two-year public institutions in the United States to (1) ascertain the extent of any self-directed career planning which may be paramount to career objective achievement, (2) solicit advice with regard to those career strategies that may be useful to individuals desiring to become presidents, and (3) identify personal factors and strategies that influence the attainment of a career objective.

Career strategy was defined in the Payne study as a dynamic process utilized by an individual in the acquisition of a perceived career objective. Items in the Payne 1980 study were evaluated for face validity by a panel of six judges. The panel of judges agreed that items were valid as constructed (Payne, 1980, p.69).

Reliability of this study was ascertained by a test-retest strategy via a comparison of this study's results and those of Payne's study. Internal validity coefficients (Craubach's alphas) were computed for all composite scales, and the coefficients ranged from a low of .43 to a high of .83.

Content validity was established for this study through an expert panel of six former community college chief administrators.

The Payne questionnaire used for this study adapted questions 1 to 18 from the Tennessee Self-Concept Scale which has had extensive reviews of its reliability and validity.

Items 19 to 31, 41, 42, 43, 45, and 65 of the questionnaire were Likert-type items to measure, indirectly, the respondent's career strategy.

The scale utilized to assess the value (time) orientation of respondents was the White-Boone (1976, p. 140) adaptation of an instrument designed by Rosen (1956) to ascertain an individual's specific time orientation (present/future). Eight statements, items 32-39, were included to provide a present/future value (time) orientation scale.

The respondents were asked to prioritize career strategies in terms of self-perceived importance to obtaining the position of president (Question 90). The elicited responses were essentially self-classifications as Loyalist, Diversifier, or Affiliator. Throughout this study, career strategy type refers only to self-identified status.

Item 40 asked respondents to indicate the ideal time they perceived one should serve in other administrative positions before assuming a college presidency.

Items 46 to 49 and items 66 and 67 were self-reported reasons for success, advice for presidential aspirants, and self-identified levels of motivation.

Items 50-65 were utilized to measure the perceived beliefs concerning control in one's life, i.e., the internal-external control variable.

Items 68 to 80 were used to describe the ideal attributes of a president's image. Questions 81 to 88 were designed to collect information about the respondent and his family.

A second question on career record (item 89) was also included, designed to elicit information on the previous professional positions held by community college presidents since age 22. A listing of jobs held prior to their current position provided data needed for analysis of both the specific jobs and the progression or nature of up to five prior positions. This listing of the incumbents' work history enabled the researcher to make comparisons between career progressions and stated career strategies of respondents.

Summary of Findings

The typical respondent was a white male, 45 years of age or older. He was likely to be married and possess a doctorate in the field of education. He was likely to have a spouse employed in a professional position. His mother is likely to have been a homemaker with a high school education, and his father had less than a high school education. He probably indicated utilizing the career strategy type of Diversifier.

Presidents were found to have a high level of commitment to family and to be highly motivated, with a positive physical self-concept. The majority of respondents tended to recommend career strategy actions to aspirants of "improve qualifications" and possess "interpersonal skills" while seeking varied career experiences and challenges. Also, the majority of presidents indicated that the ideal community college president should be creative and influential.

Tests of three of the five hypotheses formulated to guide the study revealed no significant relationships between perceived career strategy and the socio-demographic, familial, and career record factors. The level of career strategy was, however, related to the socio-psychological factors. The fifth hypothesis revealed relationships between community college presidents' perceived career strategy and socio-psychological factors persisted even when selected independent factors were held constant.

The findings of this study were similar to those of studies conducted by Susan Payne (1980) and George Vaughan (1986). In both the Payne (1980) and Vaughan (1986) studies the majority of respondents came from a blue collar background, were married, possessed a doctorate in the field of education and were high achievers.

CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS

The purpose of this study was to determine (1) the perceived strategies by which individuals became president (chief executive offjcer) of a community college in North Carolina, Virginia, and Maryland and (2) any relationship between those perceived strategies and selected socio-demographic, familial, career record, and socio-psychological factors. Presented in this chapter are the conclusions and implications drawn from the study findings, as well as recommendations for further research.

Conclusions

Based upon the testing of the five research hypotheses formulated to guide this study, the following conclusions applicable to the population of this study were reached.

CONCLUSION 1: Community college presidents utilize several career strategies in the pursuit of that leadership position.

This conclusion is based on the findings of this study and those of a similar research project recently conducted by George Vaughan (1986). This conclusion was also substantiated in a 1980 study conducted by Susan Payne. For the majority of the respondents in the present study of mid-Atlantic states, community college presidents selected the Diversifier and Loyalist career strategies as they prepared to become president. The findings revealed that most used a combination of the Diversifier and Loyalist career strategies.

CONCLUSION 2: Community college presidents as a group feel that their performance in jobs held prior to becoming the chief executive officer was the single most important factor in their having been tapped for the presidency.

This conclusion is supported by the findings of this study as well as Vaughan's and Payne's research findings. Indeed, the research studies on executives in the private sector also support this conclusion. Nearly all studies that related high job performance to salary adjustments singled out job performance as the important factor in salary determination.

CONCLUSION 3: Community college presidents believe that aspirants who wish to become chief executive officers of community colleges should seek the doctoral degree and acquire a diversity of experience in both instructional and junior-level administrative positions.

Payne (1980), Vaughan (1986), and Cohen (1987), as well as community college influentials throughout the U. S., have been strong advocates of increased graduate education and in-service education for present two-year postsecondary education and other persons seeking employment in private and public two-year postsecondary institutions. The findings of this study strongly support the improvement of qualifications for current and potential community college administrators and other professional educators in the two-year institutions.

Twombly (1986) reported that the two-year college labor market for presidents, chief academic officers, and chief student affairs officers appears to be relatively closed to persons from outside markets. Five employment positions held prior to the respondent's present position frequently included the position of dean, within the two-year community college structure, as a pathway to the presidency. Of the five positions investigated, the first, second, and third positions included the position of dean.

CONCLUSION 4: Self-reported career strategy types (loyalist, Diversifier, and Affiliator) are not viably explained by any independent factors.

No relationships were found between perceived career strategies and the socio-demographic, familial, career record, and socio-psychological factors. One may conclude that perhaps other factors should be investigated to determine and explain career strategies.

CONCLUSION 5: Level of loyalism displayed by community college presidents is a function primarily of positive physical self-concept and length of time with the organization.

While a high level of loyalism was reported in all the respondent characteristics, the only significant relationships found were with physical self-concept and length of time with the organization. This finding is congruent with the Loyalist career strategy type.

CONCLUSION 6: Level of diversification for community college presidents is related to positive physical self-concept and time orientation.

The analysis of level of diversification and the independent socio-demographic, familial, career record, and socio-psychological factors revealed significant relationships with the socio-psychological factors of physical self-concept and time orientation. These two factors accounted for 26 percent of the variation in the perceived career strategy level of diversification. Respondents indicating a high level of diversification reported both present and future time orientations.

CONCLUSION 7: Level of affiliation for community college presidents is best reflected in type of degree and size of household.

Respondents with master's and doctoral degrees were shown to have low levels of affiliation. Type of degree accounted for 8 percent of the variation in the perceived career strategy level of affiliation. Respondents with smaller size households (2 persons) and larger size households (5 or more persons) overwhelmingly indicated a low level of affiliation.

CONCLUSION 8: Level of loyalism among community college presidents is explained better by the socio-psychological variables (Time orientation, physical self-concept, and locus of control) than by socio-demographic, familial, or career record factors.

A significant relationship was found between level of loyalism and time orientation, physical self-concept, and locus of control when a correlation matrix was developed. No statistically significant relationship was found with the socio-demographic, familial, or career record factors. One may conclude that the socio-demographic factors of age, gender, race, marital status, type of degree, and discipline of degree are not critical factors in the level of loyalism exhibited by respondents. The familial factors of education of parents, occupation of parents, employment status of spouse, and size of household are not critical factors in the level of loyalism. Also, the career record factors of ideal time in other administrative positions and previous professional positions are not critical factors in the level of loyalism exhibited by respondents.

CONCLUSION 9: The most variation in level of diversification among presidents is explained by time orientation and physical self-concept.

One may conclude that the factors most critical to level of diversification of mid-Atlantic community college presidents is time orientation (present-future) and physical self-concept. The socio-demographic, familial, and career record factors, as well as the socio-psychological factors of locus of control, are not critical factors in the level of diversification of respondents. These two factors accounted for 26 percent of the variation in the perceived career strategy level of diversification.

CONCLUSION 10: Factors articulated with level of affiliation of community college presidents are yet to be identified.

One may conclude that the independent socio-demographic, familial, career record, and socio-psychological factors are not critical to the level of affiliation reported by respondents. No significant relationships were found between any of the independent factors and dependent factors of perceived career strategy. A further conclusion may be that other factors are critical to the level of affiliation of community college presidents.

Implications

There appears to be no clear primary strategy for obtaining the position of community college president in the state systems of North Carolina, Virginia, and Maryland. An in-depth study of what the incumbents do in that office may provide insight into characteristics or factors that lead to success in obtaining the position. The relative degree of development of the community college and its top administrative position over time may require further study.

One implication drawn from the findings is that the search for chief administrative officers has turned inward as the community colleges have matured. These maturing institutions appear to be providing a pool of qualified applicants with knowledge and experience based in the operation of community colleges. As a result, external sources of chief administrative officers, i.e., public school administrators, individuals from four-year institutions, and chief executive officers in private industry, are not utilized as much as in the earlier development of the community college.

The findings of the present study also revealed that while "doing the job well" is how the incumbents felt they obtained their current position, "improved qualifications" and more "varied career experiences" are their recommendations to aspiring candidates. Graduate programs developed to train and develop individuals for administrative posts in the community college system would provide methods of improving aspirants' qualifications for the presidency. Emphasis would be on the development of leadership techniques

aimed at prospective community college presidents. Further, these activities should be designed to allow individuals to prepare for various career experiences within the community college system. Varied career experiences, as recommended by community college presidents, implies a gathering of knowledge and abilities to meet the many challenges of presidential leadership.

A further implication is the need to determine or develop a clear idea of what presidents do. Knowledge of what the job entails will enable those who aspire to the position to become aware of what competencies, skills and characteristics will be required. The findings indicated the importance of self-concept. For individuals to assess their own skills, values, attitudes, personality traits, etc., in terms of the requirements of the position, these characteristics must be known variables.

Community college presidents are reluctant to identify with the Affiliator strategy. While the characteristics of the Affiliator have been utilized to obtain the position of president, incumbents are not comfortable with admitting their use. Further examination of the reasons for reluctance to identify with the characteristics may yield insight for this phenomenon.

Recommendations

Based on the findings, conclusions, and implications of this study, the following recommendations are offered.

1. The population of this study was limited to the 98 community college presidents in North Carolina, Virginia, and Maryland. As time changes, so will the individuals who occupy the position of community college president. Therefore, it is recommended that a replication of this study be conducted with a larger sample to provide additional and updated information on perceived career strategies utilized in obtaining the position of community college president.

2. Replication of this study using a different research design, one other than the survey instrument, is recommended. A recommended design would be that of case study, with personal interviews and on-the-job observation.

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OUTCOMES-BASED AND RESULTS-ORIENTED BUDGETING: A CASE STUDY IN A SMALL RURAL COMMUNITY COLLEGE

by

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A Case Study
Submitted to the North Carolina
Department of Community Colleges
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requirements for completion of the
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TABLE OF CONTENTS

	PAGE
LIST OF TABLES	iii
ACKNOWLEDGMENTS	iv
INTRODUCTION	1
THE PROBLEM	2
THE BUDGET DECISIONS	4
THE PROGRAM DESIGN	6
THE STUDY OUTCOMES	7
CONCLUSIONS	9
REFERENCES	11

LIST OF TABLES

TABLE		PAGE
1.	Changes Implemented Starting Fall 1989	6
2.	Comparison of Fall 1987 and Fall 1990 Developmental Students	7
3.	Comparison of Fall 1987 Students and Fall 1990 Developmental Students Who Also Received Quarterly Intensive Counseling Intervention and Support	8
4.	Comparison of 1990 Developmental Students Who Received and Those Who Did Not Receive Intensive Counseling Intervention and Support	8

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INTRODUCTION

This case study details a budget decision made to enable a small rural community college to reach a desired goal and the follow-up research to determine how well the college achieved its goal. The study, predicated on recent developments in community colleges, suggests the need to depart from the traditional budgeting methods to matching budget line items with specific desired outcomes.

Higher education's agenda is increasingly dominated by concerns about money. The news from the nation's colleges and universities in the past year has focused primarily on stories of budget shortfalls, layoffs, and program cuts. In a 1992 survey sent to senior administrators at 510 colleges and universities by the American Council on Education, budget cuts and reduced revenue were found to be among the top three most frequently cited of all campus issues in the 1991 academic year (see The Chronicle of Higher Education Almanac, 1992, p.37, for complete data). The same survey showed that the campus responses to the financial pressures were very highly diverse in the way they were expressed at the different campuses. The data further indicate that many of the solutions can reap only short-term benefits. For example, among the most frequently cited responses sixty-five percent (65%) of the colleges and universities increased student fees, and fifty-seven percent (57%) postponed spending for buildings and equipment. These measures, although likely to be necessary at the time, are also likely only to delay the inevitable need to establish the long-term priorities for our campuses. In turn, these priorities will need to state the ways that we intend to do business in the next decade and with the assumption that the financial resources available to the colleges and universities will be far more scarce than they were in the past decade.

Especially with limited funds, it is important that persons making the decisions in colleges and universities establish the budget priorities on the basis of the outcomes that their particular institutions plan to achieve. This is a departure from traditional approaches that typically assume an arbitrary number of staff positions per unit, with the unit being defined in such various ways as the number of students enrolled, the number of credit hours generated, and the number of different departments or divisions requiring supervision. In an outcomes approach, previous notions of necessary expenditures will be set aside in favor of needs assessments and follow-up research to determine the work to be done and the resources to accomplish that work. The budgets would then be allocated accordingly.

Community colleges are defining their expected outcomes in ways that make targeted budgeting a real possibility. The colleges are working at these definitions with the knowledge that they must communicate outcome expectations and results to significant officials if they are to receive their equitable share of very scarce resources. The colleges expect that defining these outcomes will become part of their routine way of doing business for many years to come and have already incorporated these expectations in their communications with one another.

For example, in 1987 the sixty-six member Commission on Colleges of the Southern Association of Colleges and Schools (SACS) added a criterion on "Institutional Effectiveness." This was an expansion of the Criteria for Accreditation to an emphasis on the outcomes of education rather than such traditional resource measures as the number of library holdings and the proportion of faculty holding doctorates (see Resource Manual on Institutional Effectiveness, 1989). Further substantial commitments to an outcomes orientation are found in the literature of most if not all, of the key organizations of higher education. As early as 1986, a task force bringing together representatives from two affiliate Councils of the American Association of Community and Junior Colleges (AACJC), the National Council for Occupational Education (NCOE) and the Community College Humanities Association (CCHA) met and discussed the need for regular, formal, and systematic assessment of student outcomes (see Successfully Integrating the Humanities into Associate Degree Occupational Programs, 1991). While the purpose of the task force was centered on the general education core and its humanities component, the outcomes orientation of this broad representation from key higher education associations in the mid-1980s offers further illustration that we have fully entered a results-oriented future with overwhelming support and endorsement from significant higher education organizations and groups.

State officials and departments contributed substantially to this outcomes orientation. In 1987, the North Carolina State Board of Community Colleges established a 23 member commission, which later gave the colleges 33 recommended actions for their future, based on a comprehensive study of the 58 community colleges and a review of the challenges faced then by business and industry in the state (see Gaining the Competitive Edge: The Challenge to North Carolina's Community Colleges, 1989). From this report, the next year the North Carolina Department of Community Colleges and its member institutions developed 31 critical success factors and their measures. These statements of outcomes provide a sound basis for state and local community college planning (see Critical Success Factors for the North Carolina Community College System, 1992).

The case study presented here provides an example of a North Carolina community college making budget decisions based on the institution's desired outcomes and then conducting research of the effects. The particular outcomes sought in this case were: (1) to increase the retention and graduation of students and (2) to retain the students to their graduations.

THE PROBLEM

This study was conducted at Mayland Community College. The college serves a population of approximately 45,000 in a three-county area situated in the Blue Ridge section of the Appalachian mountains of western North Carolina, and Mayland is the only public institution of higher learning within this geographic area. The low population densities of the region are attributed largely to the rugged mountain terrain, which has had a significant effect not only on the number of people living in the area, but also on the economic, social, and educational opportunities. As a result, at

least 90 percent of students in the college are defined as "first generation" college students, meaning that their parents had no educational experience beyond the high school level.

The college currently offers 20 programs in college preparation, technical, and vocational instruction and has an intensive schedule of occupational and non-credit offerings. Associate degrees in general education and applied science, as well as diplomas and certification programs in technical and vocational areas, are available to students. Adult Basic Education (ABE) and General Educational Development (GED) programs are available both on campus and at many industrial sites throughout the three-county region.

Prior to fall quarter 1989:

1. Students and their faculty advisors were by-passing academic assessment procedures. With an average class size of 13 students at that time, some feared that classes would be canceled due to insufficient enrollments if underprepared students were sent to developmental (pre-college level) classes.

2. An individualized instruction laboratory did not exist for curriculum students. The only such facility available was designed for use by ABE and GED students.

3. Developmental English, reading, and mathematics classes were taught either by part-time faculty members or by traditional English and math instructors, who usually preferred teaching the upper-level courses.

4. Developmental classes were earning credit toward degrees.

5. The college made no efforts to identify students who were potentially learning disabled. Consequently, it was unknown whether a student with low test scores was a slow learner, lacked adequate academic preparation in the past, or had a disability that would require certain adaptations in the classroom.

6. An extremely small number of handicapped and disabled students was enrolling in the college. Statistics from fall quarter 1987 indicate that only two such students were enrolled during that term. By fall 1990, 38 students identified with handicaps were enrolled.

7. Enrollments also reflected a small proportion of low-income students being served. Of 743 students enrolled during Fall Quarter 1987, 163 (22%) received financial assistance in the form of Pell Grants. This appeared low in a college district with the mean per capita income 26% below per capita income for North Carolina and 35% less than the per capita income for the United States as a whole.

In 1988, the chief academic officer identified and called forth a task force to study these issues and concerns. The group included the Dean of Academic Services, the chief planning officer, and instructors representing English, mathematics, vocational trades, and business applications. In its

deliberations, the task force carefully considered whether to require placement testing and mandatory placement of all students. The disadvantages and advantages discussed were that mandatory placement would:

1. decrease the small class sizes even further.

2. cause underprepared students to get increasingly discouraged and take longer to graduate.

3. encourage a better image of Mayland classes in the community at-large.

4. allow more homogeneous classes to be taught at the college level.

5. provide students with the degree of remediation needed instead of allowing their enrollment into a curriculum with deficient skills.

6. make agencies more likely to refer handicapped and low income students to enroll if the necessary support services were available.

After careful consideration, the task force decided to take the risk. The numbers and types of developmental classes were expanded at a time when classes were already small, with a faculty to student ratio of less than one to thirteen. In the short term, the group chose to sacrifice higher funding formula allotments from the state in the program areas since they would lose underprepared students who would otherwise be in program area classes. Required testing and mandatory placements were instituted for students in the technical and general education areas exclusively. A different task force dealt with vocational students as a separate issue at a later date. Fall quarter 1989 was targeted as the full implementation date with the following measureable outcomes expected:

1. Developmental students will persist regardless of new mandatory testing and course placements.

2. Developmental students will persist regardless of their newly delayed entry into classes which count toward degrees.

The targeted budget for achieving these results is in the next section.

THE BUDGET DECISIONS

To reach the outcomes the task force identified, two new instructors were to be hired. Qualified to teach English and mathematics, these instructors would have had experience working with individuals from educationally disadvantaged backgrounds. The new personnel would nearly eliminate the use of part-time instructors in developmental classes. More importantly, the classes would be taught by faculty with expressed interests and capabilities in teaching students identified through the college placement tests as underprepared for college-level classes. Further, these faculty would have the prime responsibility for developing the needed classes and laboratories in English, reading and mathematics, and for determining the appropriate instructional materials.

Secondly, it was decided that there needed to be counseling and peer tutoring support to encourage the referrals and persistence of the students. The counseling would lend encouragement despite the students' delayed entrances into the classes and programs of their interests. Additionally, the counseling would provide the liaison activities between the developmental offerings and the community agencies that could provide continual referrals of disadvantaged and handicapped persons to the classes and laboratories. The tutoring would in turn assist the students' eventual transitions from the developmental classes and laboratories to the college-level courses and curriculum.

At this point, the estimated costs associated with the implementation of a strong developmental studies program were close to $100,000. Two non-traditional instructors were hired at a cost of approximately $35,000 each, a counselor was added at a cost of $30,000, and testing materials and supplies amounted to approximately $500. Not calculated in the costs were the effects of adding additional courses and laboratories at a time when the average class size was fewer than thirteen students. The placement test scores in 1988 indicated that nearly one-fourth of the students in these classes required remediation in English and/or reading and forty-four percent required remediation in mathematics.

There were grave concerns about the effects of advising underprepared students away from already small classes. In a small college, classes are best offered in sequence. Often, just one full-time instructor is responsible for an entire curriculum program. Thus, in a given quarter, the one instructor teaches both the first- and second-year classes. A result of having a significant proportion of the students in the developmental classes during the fall quarter would be that fall quarter curriculum classes would need to be offered again in another quarter of the same year. The cost of this was not added into the calculations since another concern was whether instructors for the added classes could be found.

Despite these concerns, the college planned a 1988-1989 budget with the inclusion of two developmental instructors, a counselor, and tutorial funds. To implement these positions, staff members sought counsel from the developmental studies task force and wrote a proposal for obtaining some of the funding from the U.S. Department of Education. This resulted in a three-year renewable grant covering the costs of a counselor, 10 percent of the direct costs for two instructors, and more than 90 percent of the institution's tutorial funds. The remainder of the funds was from the elimination of a curriculum program that had too few students and inadequate industry support for continuing the program.

The combination of thoughtful planning, seeking external funding from a grant source, and elimination of a curriculum program made the developmental studies program possible. A counseling position was created and based on desired outcomes, not on the more traditional consideration of the number of students enrolled. Two faculty positions were created based on desired outcomes, not on the proportion of classes taught by full-time versus part-time faculty. The budget decisions were entirely based on the outcomes that were identified by faculty and staff as being highly important institution.

THE PROGRAM DESIGN

Prior to fall quarter 1989, educational assessment via placement testing was optional for new students entering the college. Students took placement tests at any time during their college years to "test out" of the developmental classes of English 100, Reading 100, and/or Mathematics 100. The classes were otherwise included in the requirements for the two-year degrees. Since placement in 90-level classes was not regulated for this group, enrollments in them remained very low (fewer than six students per year). That process was modified in 1989 as shown in Table 1:

TABLE 1

CHANGES IMPLEMENTED STARTING FALL 1989

1. Mandatory placement testing was instituted for all new General Education and technical program students.

2. Mandatory course placements were initiated based upon these test scores.

3. Counseling services especially targeted students in developmental classes. The classes were no longer part of the degree requirements.

4. Non-traditional instructors were hired to teach developmental classes and individualized instruction was made available in laboratories especially designed for degree-seeking students.

To determine the effect of a developmental studies program on student retention rates, a comparison group was first defined and then selected. This group consisted of underprepared students in the technical programs and in General Education (G-020). They were newly enrolled in fall quarter 1987 and had completed a 90 or 100-level class in English, reading, or mathematics. The records of the students were tracked over a two-year period ending in fall quarter 1989, The results were then compared to results from students who enrolled during fall quarter 1990 and who met the same criteria. Their records were tracked over an equivalent period of time ending in fall quarter 1992. Excluded from the records were those from special credit, high school, and all vocational program students. Special credit (those with undeclared college majors) and high school students were not selected because they usually do not intend to complete a program or to graduate. Students enrolled in vocational programs were likewise not incorporated into the study, since mandatory testing was not in effect in fall 1990 for enrollees in these programs.

Information contained in the academic records of the two groups was then assembled and analyzed to determine whether these students were "persisters," meaning that they (a) had graduated from the college, (b) had transferred to a four-year institution, or (c) had not graduated from the college but were still enrolled two years after their entrance.

Those who fit this criteria were identified as persisters or completers. All others were defined as non-persisters or non-completers. The results are contained in the next section.

THE STUDY OUTCOMES

In this study, two groups of students were compared. Students who completed developmental studies classes and laboratories in fall 1987 were compared with their counterparts who completed these classes in fall 1990. The difference in the groups was that the fall 1990 students received mandatory placements in the classes and laboratories based on their test scores, were encouraged to sign up for intensive advising, counseling and tutoring support, and were in classes that did not count toward degree requirements. Further, the teachers of the fall 1990 students were more likely to be full-time instructors and have an expressed preference for and experience in working with underprepared students.

The count data in this study are considered a binomial situation; that is, two possible outcomes are noted as persistence and non-persistence. When the numbers were great enough to assume a close approximation of the normal distribution to the binomial distribution, Z tests of significance were applied. In each case, two proportions were compared using the Z score. When the Z score obtained was greater than a plus or minus 1.96, it was determined that there was a difference between the proportions. For values less than plus or minus 1.96, it was deemed that the data outcomes could have occurred by chance.

Tables 2, 3 and 4 show the results.

TABLE 2

COMPARISON OF FALL 1987 AND FALL 1990 DEVELOPMENTAL STUDENTS

	1987 Students	1990 Students	Z Score
Graduated or Still Enrolled in Two Years	50% (17)	56% (33)	.559
Graduated	38% (13)	39% (23)	.096
Still Enrolled	12% (4)	17% (10)	.674

The Z score in Table 2 shows no difference in the persistence of developmental students in 1987 and 1990. Their persistence stayed the same, regardless of whether placement testing was required and the scores determined the students' placements in English and mathematics courses.

Table 3 shows a comparison to determine whether there was a difference between the fall 1987 and fall 1990 developmental students when the 1990 students took advantage of intensive academic advising and counseling intervention, including quarterly interviews and feedback concerning their progress in classes. The results showed that there was a difference between the two groups. The counseled students were more likely to persist.

TABLE 3

COMPARISON OF FALL 1987 STUDENTS AND FALL 1990 DEVELOPMENTAL STUDENTS WHO ALSO RECEIVED QUARTERLY INTENSIVE COUNSELING INTERVENTION AND SUPPORT

	1987 Students	1990 Students	Z Score
Graduated or Still Enrolled in Two Years	50% (17)	86% (18)	3.14
Graduated	38% (13)	57% (12)	1.20
Still Enrolled	12% (4)	29% (6)	1.50

Table 4 shows a comparison of 1990 developmental students who received and those who did not receive counseling intervention. Again the data showed that the students who took advantage of the counseling intervention were more likely to persist at the college.

TABLE 4

COMPARISON OF 1990 DEVELOPMENTAL STUDENTS WHO RECEIVED AND THOSE WHO DID NOT RECEIVE INTENSIVE COUNSELING INTERVENTION AND SUPPORT

	Non-Counseled Students	Counseled Students	Z Score
Graduated or Still Enrolled in Two Years	40% (15)	86% (18)	4.19
Graduated	29% (11)	57% (12)	2.14
Still Enrolled	11% (4)	29% (6)	1.61

The data from Table 4 appear to confirm that developmental students are more likely to persist when they receive quarterly counseling intervention in addition to their subject matter remediation.

CONCLUSIONS

The case study presented here illustrates some processes community colleges are likely to engage in as budget decisions become increasingly linked to the institutions' outcome objectives. The study listed some outcomes that the college wanted to achieve, some budget decisions that had to be made to accommodate those objectives, and some research that helped determine whether the institution was accomplishing what it set out to do.

The findings of the research showed that when new students at Mayland were required to take developmental classes of English, reading, and/or mathematics due to low placement test scores, they persisted at the college at the same rate as students who did not have to meet this requirement. There was no difference found in the persistence of fall 1987 and fall 1990 developmental students. The fall 1987 students were usually advised, rather than required, to take the developmental classes of English, reading, and mathematics. In addition, the 1987 developmental classes earned credit toward the two-year associate degree. The instructors of the earlier classes were typically part-time faculty or full-time instructors who preferred teaching upper-level classes. There were no individualized instructional laboratories other than ABE and GED.

Further, it was found that the developmental students who took advantage of intensive academic advising, quarterly reviews of their progress, and counseling intervention, along with their developmental coursework, were more likely to persist than the students who did not use these services. This was found in a comparison of counseled and non-counseled students in 1990 and in a comparison with the 1987 students who had no counseling of this magnitude available to them.

The statistical method used was to obtain Z scores from comparisons of proportions of persisters and non-persisters. Differences between the proportions were determined at the .05 level or a Z score of 1.96. Implied from the study is that delaying underprepared students' entrance into classes that count toward degrees is unlikely to deter their persistence toward degrees. The students' persistence can also be greatly expedited by supplementing their coursework with a strong mentoring system, providing ample opportunity for student progress reviews and feedback.

To achieve these outcomes, the college had to carefully budget certain resources. In the absence of any new revenues to finance these outcomes, the college made a tough decision: to close a curriculum program, one of the first programs to be established when Mayland was founded in 1971. There were many college and community sentiments for that program, even though it was no longer effective. The college also found itself in very stiff competition for funding from an external grant source; the college would have kept working at this if it had been unsuccessful at first. As is increasingly likely to be the case in the future, the identification of desired outcomes came first, followed by the seriousness of the budget considerations.

A final but very critical point regarding outcomes financing is that the data have not been available for measuring the outcomes most important to community colleges. These data could best justify the budget expenditures and sacrifices. These relate, of course, to student learning. For example, in the case study presented here, the outcome most wanted was to raise the college's academic standards. Historically, grades were inflated at Mayland in the face of minimal screening of students for their basic skill levels in English, reading, and mathematics and a corresponding lack of appropriate course placements in developmental and college-level classes based on students' tested skill levels. The problem was compounded in small classes where instructors tended to accommodate a broad range of student abilities.

There are indications that academic standards improved with a greatly strengthened developmental studies program. As an example, Mayland's enrollment growth rate from fall 1987 through fall 1990 was more than double the state average in the same years (8.75% compared with 4.125%). In fall 1990, Mayland's enrollment growth rate (24%) was the highest among all of the 58 institutions in the North Carolina Community College System.

Intuitive knowledge of the Mayland region assumes that the substantial enrollment growth was highly related to quality improvements. Nevertheless, to demonstrate that academic standards were indeed raised after substantial commitments were made to the developmental studies program in 1989 would require that Mayland have a record of student outcomes in basic skill areas dating back to 1987 for the comparison. This was not the case. In fact, this type of information is still not available. This points out the critical need for community colleges to move quickly forward in defining their expected learning outcomes and immediately applying the corresponding measures among exiting students. When this task is accomplished, community colleges will be truly positioned to make budget decisions based on the most critical of all student outcome issues and concerns.

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THE EFFECTIVENESS OF COLLEGE ORIENTATION AS TAUGHT AT FOUR NORTH CAROLINA COMMUNITY COLLEGES

by

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ABSTRACT

The purpose of this study was to determine if an orientation course would promote retention and higher college GPA's for community college students who successfully completed the course. The sample consisted of 87 pairs of students at four North Carolina community colleges. All of the students were first-time enrollees in higher education, and they were full-time, daytime, degree-seeking students. The experimental and control groups were very closely matched in terms of gender, age, race, entrance test scores, college major, and employment status.

The research findings supported the primary hypotheses. Community college students who successfully completed an orientation course during the first quarter of their enrollment had higher retention (i.e. earned more hours of credit) and had higher cumulative GPA's after one year of college than similar students who did not enroll in the course. Students completing an orientation course earned an average of ten more credit hours during the year and achieved an average GPA that was 0.34 higher than the control group.

The 58 community colleges in North Carolina were surveyed to determine the prevalence of an orientation course and the role of the course on the various campuses. Eighty-six percent of the colleges responded. About half of these offered the course, and 70% of those required it. The typical course met for 11 contact hours. Additionally, over 400 students taking an orientation course at a community college were surveyed. Three-fourths reported satisfaction with the course and would recommend it to others.

TABLE OF CONTENTS

Page

INTRODUCTION AND REVIEW OF THE LITERATURE 1

Attrition and Retention 1
Orientation Courses 2
Retention, Orientation Courses, and the Community College 2
Proposed Solutions to the Dropout Problem 3
History of Orientation Courses 4
Recommendations for a Successful Course 5

METHODOLOGY 6

Subjects 6
Population 6
Selection of Subjects 6
Procedure 7
Synopsis of the Orientation Course as Taught in This Study 7
Data Collection 8

FINDINGS 8

Results of NC Community College Survey 8
Description of the Subjects 10
Hypothesis Testing 13
Student Evaluation of the Course 17
Gaining Student Support for Orientation 18

CONCLUSIONS 18

REFERENCES 20

INTRODUCTION AND REVIEW OF THE LITERATURE

ATTRITION AND RETENTION

Few topics are attracting more attention today in higher education than the topic of student attrition. Why do so many college students drop out, and what can be done to prevent them from dropping out? Interest in student attrition has ebbed and flowed throughout this century in direct response to rising and falling college enrollment trends.

Numerous research studies have been conducted concerning student retention/attrition. Earlier studies focused more on why students drop out, or attrition. Since the 1970s the focus has shifted to retention, or keeping students enrolled (Shanley, 1987). This emphasis has been increasing as the number of new high school graduates has been declining. Apparently as a result of the lower birth rates since the 1950s baby boom, the number of new high school graduates will continue to decline each year until 1996 (Noel, 1985). This predicted loss and the accompanying funding loss for higher education have given colleges a sense of urgency in detecting and retaining potential dropouts.

Colleges have invested great resources in attracting nontraditional students such as older adults, women, minorities, and students from lower socioeconomic backgrounds in order to sustain their programs. Intensive recruitment has succeeded in maintaining enrollments, but these nontraditional students are less likely to persist to degree completion than the traditional new high school graduate. Consequently, since 1975 there has been a proliferation of research concerning the retention of college students (Upcraft & Gardner, 1989).

Consider the findings of the following retention studies conducted at approximately 20-year intervals. In the first national retention study in the United States, McNeely (1938) surveyed 25 universities. He reported that the dropout rate from higher education was 45%. In 1958 Iffert surveyed 149 colleges and reported that approximately 50% of each new cohort of freshmen would neither graduate nor still be enrolled by the end of four years. Using very precise definitions of withdrawing from college and longitudinal data, Tinto (1987) reported that the true overall national attrition rate was 34 percent for four-year colleges and 54 percent for two-year colleges. He went on to state that based on a review of the literature these rates have not changed appreciably in this century. Considering these reports, one can conclude that student attrition is a continuing problem and apparently very little has been done to effectively improve retention during this century.

Why does it matter if students drop out? In order to enhance the student's future quality of life, and to provide for society's need for skilled workers, colleges must strive to retain their students. Boyer (1987) challenged colleges to be as concerned about student attrition as they are about attracting and enrolling students.

Colleges are feeling the effect of governmental revenues losses. Most colleges are funded in direct proportion to the number of students they serve. Such is the case for the North Carolina Community College System, where the state's funding for normal operations is based on the number of full-time equivalent (FTE) students enrolled in the previous year. Consequently, a major motivation for colleges to improve retention is to maintain funding.

ORIENTATION COURSES

Blum and Spangehl (1982) in a review of the literature suggested that all college students, and high-risk students especially, needed a support system to help them persist until graduation. Among factors that affect student persistence in college, perhaps none is more important than the student's level of involvement in the total academic environment (Astin, 1975). In particular, a student must have interactions with faculty, staff, and other students if the student is to develop a sense of "fit" and remain at the college (Tinto, 1987). Providing this support system, opportunity for interaction, and encouragement to get involved in one's own education has given impetus to development of the orientation course for new college entrants.

The course typically meets weekly throughout the first term of enrollment and has been called by many different names at different institutions, including "college survival," "freshman seminar," "student success," "study skills," "enhancing college life," and "academic skills." It has been described as a course for helping new students to feel more comfortable in the threatening college environment.

The course assists students in developing academic, personal, and social skills considered necessary for college success. Opportunities are provided for an extensive orientation to the institution, an introduction to campus support programs and services, familiarization with extracurricular activities, and frequent interaction with other students. This is done through a variety of informal class discussions, self-discovery exercises, information exchanges, and diverse assignments (Gordon & Grites, 1984). The overall goal of the course is to increase student awareness of and responsibility for their education.

RETENTION, ORIENTATION COURSES, AND THE COMMUNITY COLLEGE

Research has shown that students completing an orientation course have lower attrition rates and higher grade point averages (GPA's) than those who do not take such a course (Cartledge & Walls, 1986; Cohen & Jody, 1978; Friedland, 1984; Gardner, 1986; Shanley, 1987; Upcraft & Gardner, 1989). A four-year study of 44 public and private colleges and universities conducted by the ACT National Center for the Advancement of Educational Practices recommended that the orientation course for new students was one of the six best strategies for insuring student success (Forest, 1982). Titley (1985) went so far as to say that an orientation course is the single most effective intervention technique available to colleges for enhancing freshman success.

Two studies specifically examined the effects of orientation courses on both retention rates and college GPA's. In the first, Stupka (1986) divided students into three groups: 1) students enrolled in an orientation course called "College Success"; 2) students who attended a three-hour orientation session; and 3) students who attended a one-hour information session. He reported that taking the College Success course resulted in significantly higher academic performance and persistence as measured by the number of college credits earned, the cumulative GPA, and the attrition rates of the three groups ($p<.05$).

In the second study, Kathryn Wullner (1989) studied the relationship of college orientation classes to persistence and college GPA. She also found that students who passed the course had higher GPA's and higher retention rates than students who did not take the course.

Community colleges have much higher attrition rates than four-year colleges. In fact, most community college students (54%) will not complete a program of study (Tinto, 1987). The factors that have been identified as contributing to dropping out help explain why community colleges have high dropout rates. Namely, colleges that have low admission requirements, that are public, two-year, and non-residential have higher attrition (Astin, 1975; Pantages & Creedon, 1978; Tinto, 1975). Furthermore, characteristics of the typical community college student are also associated with high attrition. Among them are low socioeconomic status (SES), low SAT scores, low high school grades, and low level of educational intentions (Astin, 1972; Bean, 1980; Eckland, 1964; Pantages & Creedon, 1978; Summerskill, 1962).

Community colleges provide little opportunity for their students to be integrated into the culture of the colleges. This is primarily because their students are commuters and have limited informal contact with others at the college (Tinto, 1987).

One would expect then that the community college student would benefit greatly from an orientation course. Research relating orientation to retention has been conducted with students from four-year colleges and universities. There is definitely a need for research to establish the effectiveness in reducing the attrition of community college students.

PROPOSED SOLUTIONS TO THE DROPOUT PROBLEM

Duncan (1985) addresses the dropout problem by stating that "it is not within a college's capability to prevent most attrition" (p. 16). He elaborates by saying no simple solution exists, and it is impossible to find a single cause for dropping out. However, this does not mean that nothing can be done to improve retention, and many approaches have been tried with varying degrees of success.

Tinto (1987) reviews college intervention strategies and proposes the following general guidelines:

1) Colleges must be certain that students are academically prepared for the demands of college. This should be reflected in admission policies, and also includes the remedial programs offered at most institutions.

2) Colleges should reach out and make personal contacts with students beyond the confines of the classroom. This includes mentoring, college orientation programs, seminars, extracurricular activities, dinners, and the like in a variety of settings including faculty homes. (One institution even gives free coffee to faculty in the student center in the hope of encouraging informal faculty-student contacts.)

3) Colleges should be systematic rather than "hit and miss" in their approach. A formal group should oversee and coordinate all retention enhancing activities and monitor their outcomes. The most successful programs have resulted in widespread institutional renewal, as no stones were left unturned.

4) Colleges must start as early as possible to retain students. Again this affects admission policies as an attempt is made to attract only those students who are likely to fit well in the institutional culture. It is important to note that researchers agree the first six months of college are the most critical in terms of students' decisions about persisting, and intervention techniques should occur during this period (Beal and Noel, 1979).

5) Colleges must be primarily committed to their students. Retention will not change significantly as long as research, athletics, or other concerns take precedence over students.

6) Better education, not retention, must be the primary goal of the college.

In addition to this list, improved counseling programs coupled with early warning systems to identify students who are "dropout prone" have improved retention. Special orientation sessions and support groups have been formed for special student populations such as minorities, older adults, athletes, handicapped, and commuting students (Upcraft & Gardner, 1989).

Hodges (1982) reviewed the literature and suggested the following additional proven steps that colleges may take: insure proper placement into courses; teach study habits, time management, stress management, and memorization skills (note: these are typically taught in orientation courses); initiate career counseling for all students; require staff development sessions to teach faculty how to demonstrate a caring attitude to students; insure early contact with students in academic trouble; and increase use of individualized instruction.

HISTORY OF ORIENTATION COURSES

The first freshman orientation course was offered in 1888 at Boston University, and a second course was begun in 1890 at Iowa State (Gordon, 1982). Reed College in Oregon in 1911 became the first college to offer freshman orientation for college credit. In 1916 only six American colleges offered orientation courses for credit (Brubacher & Rudy, 1958). By 1928 more than 100 higher education institutions were offering an orientation program for new students (Fitts & Swift, 1928). Forty-three percent of colleges required students to take orientation in 1948 (Upcraft & Gardner, 1989, p. 187).

During the 1950s orientation fell out of vogue and began to disappear from college catalogues across the nation. In 1966 Drake reported that 92% of American colleges offered some form of brief freshman orientation, but formal orientation courses had become rare on campuses by the mid-1960s.

What were these early courses like? Although there were variations from one college to another, typical course content included study skills, personal development, student government, health, and other topics designed to assist new students with adjusting to college (Drake, 1966). These early courses were very much like orientation courses of today.

More recently, there has been a return to longer courses which meet weekly during the first term of college. In fact, there seems to be growing national concern that the freshman year must be revamped to "front load" support systems for new college entrants. In 1983, 350 educators attended a conference hosted by the University of South Carolina titled "The Freshman Year Experience". This conference has evolved into a series of annual conferences that attracted 3000 educators in 1988 (Upcraft & Gardner, 1989, p. xiv). A major focus of these conferences is orientation courses. There are no precise data on how many colleges have which types of orientation programs, but El-Khawas (1984) surveyed 2,623 institutions and found that 78% of them offered a version of orientation. This renewed emphasis has been so prevalent that offering orientation has become more the rule than the exception.

RECOMMENDATIONS FOR A SUCCESSFUL COURSE

Although no two orientation courses are identical, colleges that have implemented successful programs have had the following similarities (Gardner, 1981):

1. The programs had the support of top administrators and usually involved both a student services dean and an academic dean.

2. A task force was formed comprised of faculty, student services personnel, and administrators. This task force studied the institution's attrition and the causes of attrition. The group also made recommendations for the course content.

3. Early contact was made with key leaders of the faculty to gain their support.

4. A campaign was undertaken to sell the college faculty on the value of the course.

5. Faculty were invited and encouraged to attend a workshop where the basic elements of the course were explained.

6. The task force used faculty feedback gained in the workshop and developed a course syllabus.

7. After gaining widespread support for the course, the course was submitted through proper channels for approval.

8. Faculty, staff, and administrators were recruited to teach the course. Teachers were in all cases willing volunteers.

9. The identified volunteer teachers attended special training sessions to prepare to teach the course.

10. After implementation the course underwent rigorous evaluation. Where possible, outside consultants performed the evaluation.

Gordon and Grites (1984) offered suggestions for an effective course. They insisted that the course must be offered for academic credit in order to gain student acceptance. In arguing for awarding credit they stated, "The skills, attitudes, and knowledge learned in a freshman seminar usually outlive those learned in many other courses because they are used almost daily" (p. 317). They agreed with Gardner (1981) that the most important qualification for teaching such a course was the desire to do so.

Gordon and Grites (1984) advised that a maximum of active participatory methods such as group activities, self-exploration, quizzes, writing assignments, oral reports, and guest speakers should be used in teaching the course.

Ellis (1986, 1989) recommended using teaching methods he called the seven-part course structure. The main components of this structure are lecture, guest speakers, students sharing, and class exercises. He recommended the use of each in equal portions. Ellis also suggested that the course is most effective when it meets for at least 30 hours during the first term of a student's enrollment. He stated that shorter versions of the course were possible but were not as effective.

METHODOLOGY

The design involved both an experimental group and a control group at each of the four colleges in the study. Every effort was made to select students as matched pairs in each group. In this way experimental subjects were matched with control subjects.

The present study focused on the successful completion of an college orientation course as the primary independent variable under consideration. The following related variables were also included with the hope of adding insight to the conflicting findings reported in the literature: age, gender, race, college major, college attended, and employment status. The related variable of college entrance test scores was also included since it had been shown to be very important in predicting persistence.

There were two dependent variables: 1) retention, measured in total number of credit hours the student completed, and 2) cumulative GPA. Both measures were taken after one year of continuous enrollment or at the time the student withdrew, whichever came first. Retention could have been measured in various ways, such as percentage of students returning after one year, number of terms enrolled, or number of credit hours attempted. Total number of credit hours earned after one year was selected as the measure of retention (or persistence) because of the precedent of its use in the literature (Farr, Jones, & Samprone, 1985; Stupka, 1986).

SUBJECTS

Population

The population consisted of new first-time, full-time, daytime, degree-seeking enrollees at four North Carolina community colleges. Specifically, four of the state's 58 community colleges volunteered for inclusion in the study. These colleges ranked 11th, 13th, 16th, and 39th in total curriculum FTE, and 11th, 16th, 25th, and 43rd in total curriculum unduplicated headcount among North Carolina community colleges in 1988-89 (*Annual Statistical Report,* 1988-89).

These colleges all responded to a survey and indicated their willingness to participate in the study. All four of the selected colleges were in the process of developing and implementing an orientation course. After receiving the survey, all four contacted this author and requested to be included in the study. Permission was granted by the dean of instruction at each institution to study selected students.

Selection of Subjects

Students were selected from each of the four colleges. Eighty-seven students were assigned to the experimental group and enrolled in a college orientation course. Eighty-seven matching students were in the control group which did not receive the treatment. This gave a total of 174 subjects (n=174).

In order to be included in the study the student was required to have a high school diploma or the GED equivalent certificate. Subjects were not selected if they had any previous college credits (i.e. no transfers or stopouts). A subject was not included unless the college had the following records for that student: age, gender, race, college major, employment status, and college entrance test scores.

Since the independent variable was defined in terms of successful completion of an orientation course, any subject in the experimental group who did not earn a grade of C or better was dropped from the study. Also, the subjects were required to complete the course during their first term of enrollment.

Only full-time students (registered for 12 or more credit hours) were included. Only students attending more than half of their classes in the daytime were included. Also, only students who indicated that their goal was to complete a degree, diploma, or certificate were included. In cases where no record of the student's goal existed, full-time enrollment was assumed to indicate that the student intended to complete a degree, diploma, or certificate.

Experimental and control subjects were matched to control for the effect of extraneous variables. A perfect match was required for gender, race, and college attended. A close match was used for age and for college major. An approximate match was permitted for college entrance test scores and employment status. For example, a 19 year old white female at college A with high test scores, majoring in electronics, and employed part-time was matched with another white female in the 17-19 age group at the same college with similar test scores, a similar major, and also employed part-time.

PROCEDURE

Synopsis of the Orientation Course as Taught in This Study

The orientation course taught at the four colleges in the study was designed to increase the student's success in college by assisting the student in obtaining skills necessary to reach his/her educational objectives. Students received one credit hour for the course which met one hour per week for 11 weeks during the first quarter of the student's enrollment. The main teaching techniques used in the course were lecture, guest speakers, students sharing, and class exercises (with each technique occurring in roughly equal portions of class time). Instructors were encouraged to incorporate a maximum of active participatory methods such as group activities, self-exploration, quizzes, writing assignments, and oral reports.

Most of the instructors conducted the class following this weekly outline:

Lesson 1	Motivation and Introduction. Selling the course to the students. Contract of course expectations.
Lesson 2	Analysis of Strengths and Weaknesses (based on an exercise in the text, *Becoming a Master Student* [Ellis, 1985]).
Lesson 3	Note-taking Skills.
Lesson 4	Test-taking Skills and Study Techniques.
Lesson 5	Memorization Skills.
Lesson 6	Tour of the Learning Resources Center.
Lesson 7	Student Development Services (financial aid, student activities, job placement, student records, etc.).

Lesson 8	Meet with advisor and preregister. Interview advisor.
Lesson 9 & 10	Optional topics selected by the instructor from the following: Time management, Goal setting, Financial planning, Self esteem, and Wellness/Stress management.
Lesson 11	Summary and emphasis on motivation to be successful in life.

Data Collection

The students were selected, matched with corresponding similar students, and assigned to either the experimental or the control group in the fall, 1990. The experimental group completed orientation during their first term of enrollment. After one full year had passed and students registered for the fall, 1991 quarter, the outcome data were collected. The researcher contacted the student records department of each college and submitted a list of the students from that college who were subjects in the study. (College personnel never knew which students were subjects. Only the researcher ever knew the subjects identities.) The colleges sent the researcher a report of the subjects' cumulative GPA's and their number of credit hours completed. These data were based on the students' current records or on their records as of the last day of attendance for those who had dropped out.

FINDINGS

RESULTS OF NORTH CAROLINA COMMUNITY COLLEGE SURVEY

The survey of North Carolina Community Colleges was answered by 86% of the 58 community colleges in NC. The results are presented in Table 1. The subject of an orientation course was of interest to most of the community colleges and many requested a summary of the results of this study.

A little over half of the North Carolina community colleges offer an orientation course. Of those that do not offer the course, 30% are planning to implement the course in the near future. Most of the colleges that offer the course (70%) require the course for certain curricula or for all students. Overwhelmingly, the course is awarded credit toward graduation. The typical course meets once per week during the quarter for a total of 11 hours (range: 10 - 44 hours). Normally, the longer the course, the less likely it is to be a required course.

Table 1

Frequency and Percentage Distributions of Respondents to the NC Community College Survey Concerning the Status of Their Orientation Course (Spring, 1990).

Questions Asked	Responses*					
	Freq.	%				
Do you offer the course?	Yes		No			
	27	54%	23	46%		
If offered, is it required?	Yes		No		In some cases	
	16	62%	8	31%	2	8%
Is it for graduation credit?	Yes		No			
	23	92%	2	8%		
Number of hours the course meets?	10 hrs		11 hrs		22 hrs	
	1	4%	18	67%	2	7%
	33 hrs		44 hrs			
	5	19%	1	4%		
If not offered, do you plan to offer course in future?	Yes		No		Maybe	
	7	30%	14	61%	2	9%

*Response rate: 86% (50 of the 58 colleges returned the survey)

DESCRIPTION OF SUBJECTS

The sample consisted of 87 pairs of students at four North Carolina community colleges. The subjects were slightly more than half females (53%) and predominantly Caucasian (84%). Three-fourths of the subjects were under 20 years of age, and approximately two-thirds worked part-time jobs and were enrolled in two-year technical associate degree programs. Frequency distributions of the foregoing characteristics are presented in Table 2.

Table 3 compares the sample with all North Carolina Community College curriculum students who enrolled in the same year with the sample. The sample approximately represents this population in gender, race, and college major. However, the sample is much younger and is employed for fewer hours than the typical student statewide. Another notable difference is that the sample consists entirely of full-time students while only 31% of the total statewide community college population attends full-time. The sample more closely approximates the full-time, daytime, degree-seeking students at medium-sized community colleges serving North Carolina's mid-sized cities located in the Piedmont area of the state.

Table 2

A Comparison of the Treatment and Control Groups Presenting the Frequencies and Percentages of Subjects for the Variables Used to Match the 87 Pairs (n=174)

Variable	Group: Treatment n	Treatment %	Control n	Control %
Institution:				
College A	34	39.1	34	39.1
College B	10	11.5	10	11.5
College C	19	21.8	19	21.8
College D	24	27.6	24	27.6
	87	100.0	87	100.0
Gender:				
Male	41	47.1	41	47.1
Female	46	52.9	46	52.9
	87	100.0	87	100.0
Race:				
Black	13	15.0	13	15.0
White	73	83.9	73	83.9
Native American (deleted from all analyses)	1	1.1	1	1.1
	87	100.0	87	100.0
Age:				
17-19	66	75.9	69	79.3
20-25	8	9.2	7	8.0
26-45	12	13.8	10	11.6
over 45 (combined with 26-45 in all analyses)	1	1.1	1	1.1
	87	100.0	87	100.0
College Major:				
Vocational	12	13.8	10	11.5
Technical	60	69.0	64	73.6
College Transfer	15	17.2	13	14.9
	87	100.0	87	100.0
Employment:				
Full-time	8	9.2	12	13.8
Part-time	57	65.5	53	60.9
Unemployed	22	25.3	22	25.3
	87	100.0	87	100.0

Table 3

Comparison of the Sample (n=174) with 1990-91 NC Community College Curriculum Students Statewide (N=230,218) Presenting the Frequencies and Percentages of Students for Primary Variables

Variable	Sample			NC Community College System*	
	n	%		N	%
Institution:					
Number of colleges	4	100.0		58	100.0
Gender:					
Male	82	47.1		95075	41.3
Female	92	52.9		135143	58.7
	174	100.0		230218	100.0
Race:					
Black	26	14.9		41416	18.0
White	146	83.9		182406	79.2
Other	2	1.2		6396	2.8
	174	100.0		230218	100.0
Age:					
17-19	135	77.6	17-19	19593	8.5
20-25	15	8.6	20-24	75236	32.8
26-45	22	12.6	25-44	110257	48.0
over 45	2	1.2	over 44	25132	10.7
	174	100.0		230218	100.0
College Major:					
Vocational	22	13.8		32439	14.0
Technical	124	69.0		139441	60.6
College Transfer	28	17.2		41409	18.0
General Education	0	0		16929	7.4
	174	100.0		230218	100.0
Employment:					
Full-time	20	11.5	approximate	100000	43.5
Part-time	110	63.2		55000	23.9
Unemployed	44	25.3		75000	32.6
	174	100.0		230000	100.0
Credit Hours:					
Full-time	174	100.0		71647	31.1
Part-time	0	0		158571	68.9
	174	100.0		230218	100.0

*NC Community College System data from *Annual Statistical Report,* 1990-91

HYPOTHESIS TESTING

ANOVA and Pearson Correlation Coefficients were used to test the hypotheses.

Hypothesis I

> Hypothesis I: Community college students who successfully complete an orientation course during the first quarter of their enrollment will have higher retention (i.e. will earn more hours of credit) than similar students who do not enroll in the course.

Table 4 shows that the students who successfully completed the orientation course had a significantly higher number of credit hours earned one year after they first enrolled than the students who did not take the course.

Hypothesis II

> Hypothesis II: Community college students who successfully complete the orientation course during the first quarter of their enrollment will have higher cumulative GPA's than similar students who do not enroll in the course.

Table 5 shows that the students who successfully completed the orientation course had significantly higher GPA's one year after they first enrolled than the students who did not take the course. In the total sample (n=174) the students' gender and race also had a significant effect on GPA's, but this difference disappeared when the effect of entrance test scores was considered.

Thus, Hypotheses I and II were supported.

Table 6 presents the mean credit hours earned and mean GPA's in terms of each independent variable.

Table 4

Analysis of Variance for Credit Hours Earned for all Subjects (n=174) Showing the Degree of Variation Attributable to Each of the Variables Considered in the Study

Source	df	SS	MS	F value
Model	92	53640.872	583.053	1.60*
Error	79	28745.006	363.861	
Corrected Total	171	82385.878		

Source	df	Type III SS	MS	F value
College Attended	3	1283.118	427.706	1.18
Gender	1	179.829	179.829	0.49
Race	1	558.026	558.026	1.53
Gender X Race	1	299.127	299.127	0.82
Employment Status	2	227.310	113.655	0.31
College Major	2	1477.838	738.919	2.03
Age	2	77.302	38.651	0.11
Orientation Course	1	3026.946	3026.946	8.32*

*Significant at .05 level

Table 5

Analysis of Variance for GPA for all Subjects (n=174) Showing the Degree of Variation Attributable to Each of the Variables Considered in the Study

Source	df	SS	MS	F value
Model	92	93.492	1.016	1.83*
Error	79	43.759	0.554	
Corrected Total	171	137.250		

Source	df	Type III SS	MS	F value
College Attended	3	1.010	0.337	0.61
Gender	1	3.043	3.043	5.49*
Race	1	3.995	3.995	7.21*
Gender X Race	1	0.216	0.216	0.39
Employment Status	2	0.801	0.400	0.72
College Major	2	3.146	1.573	2.84
Age	2	3.123	1.562	2.82
Orientation Course	1	3.270	3.270	5.90*

*Significant at .05 level

Table 6

Means and Standard Deviations for GPA's and Credit Hours Earned for all Subjects (n=174) Presented by Each of the Variables Considered in the Study

Variable	GPA		Hours Earned	
	mean	SD	mean	SD
Orientation Course:				
Completed	2.60	0.79	44.38	19.42
Did not take	2.26	0.97	35.02	23.41
College Attended:				
College A	2.56	0.87	45.93	23.80
College B	2.24	1.04	39.80	21.51
College C	2.48	1.06	41.21	20.42
College D	2.29	0.70	29.22	16.62
Gender:				
Male	2.33	0.84	42.27	22.59
Female	2.53	0.94	37.37	21.20
Race:				
White	2.49	0.91	41.49	22.30
Black	2.13	0.72	29.69	16.95
Employment Status:				
Full-time	2.53	0.75	37.90	23.59
Part-time	2.46	0.89	40.45	21.53
Unemployed	2.32	0.98	38.68	22.64
College Major:				
Vocational	2.58	0.84	53.64	21.55
Technical	2.44	0.94	39.55	22.37
College Transfer	2.28	0.74	29.04	12.77
Age:				
17-19	2.30	0.89	39.65	22.44
20-25	2.60	0.77	41.00	18.75
Over 25	3.05	0.72	39.17	21.84

STUDENT EVALUATION OF THE COURSE

Two of the four community colleges in the sample surveyed the students that took their orientation course. Most of the survey questions were evaluations of the instructors, but a few of the questions aimed at obtaining feedback concerning what the students did or did not like about the course itself.

Although only 34 students at one of the colleges were in the experimental group, many other students at the college were enrolled in the course. Consequently, 383 students in 29 classes were polled. The following questions reveal that most of the students had a favorable opinion of the course:

1. Would you recommend this course to other students? 77% said "Yes".

2. Did you learn techniques to help you become a better student? 77% said "Yes".

3. Were you satisfied with the textbook? 82% said "Yes".

4. What topic was the most helpful for you?

   Answers given at least 20 times were: Test-taking, Study Skills, Note-taking, Time Management, Memory Skills, and Money Management.

At another college, 28 students taking the course were surveyed. The following five questions were asked and are presented with all answers that occurred more than three times:

1. What did you like about this course?

   15 liked helpful ideas that led to self understanding and better study habits.
   10 liked the informality and openness of the class.

2. Would you recommend this course to other students? 28 (100%) said "Yes".

3. Were you satisfied with the textbook? 27 said "Yes".

4. What changes in the course would you recommend?

   18 said "None".
   5 said "Need longer classes and more projects".

5. Do you have any other suggestions? 18 said "None".
   4 said "Make it a required course".

Overwhelmingly the students surveyed approved of the course and would recommend it to others.

Gaining Student Support for Orientation

Three-fourths of the students participating in orientation felt that the course enhanced their academic abilities, and they would recommend it to others. On the other side of this issue, colleges should realize that approximately 25% of the students did not feel that the course was beneficial to them. Institutions requiring an orientation course have found this minority to sometimes be very vocal in their opposition to taking the course. Experience has shown that the instructors must be enthusiastic and must spend time in the initial class meetings convincing students of the benefits derived from the course. Ellis (1986) argues for the necessity of "selling" the course to students who may not immediately recognize its value.

CONCLUSIONS

Conclusion 1: Completing an orientation course during the first term of enrollment appears to promote the retention and improve the grades of community college students at the community colleges that participated in the study.

The literature indicated that orientation tends to enhance the persistence and academic performance of college students (Upcraft & Gardner, 1989). This study demonstrated the same influence among the community college students that participated.

One strength of the study was the use of matched pairs. For every student participating in the course, there was a matching student at the same college not enrolled. This design reduced the confounding effects of gender, race, academic preparation (measured by entrance test scores), age, employment status, college attended, and college major. Thus, more confidence can be placed in the positive benefits derived from taking an orientation course.

Conclusion 2: Retention and college grades were not related to age, gender, race, employment status, college major, or college attended.

Baker (1986) reported that older students (over 49 years) had the highest college success rates. Other researchers, however, reported that excessive outside demands interfered and led to higher attrition for older students. The present study showed a tendency for older students to earn higher grades, but the difference between age groups was not enough to be statistically significant. There was no pattern in hours completed related to age. These data support the conclusion of Pantages and Creedon (1978) that age is not a primary factor in determining college success.

At first glance the study appeared to support the idea that females earn higher GPA's than males, and that whites outperform blacks on both measures of success. A closer analysis showed that these differences disappeared when the effect of entrance test scores was considered. Astin (1972) concluded that the important variable was not gender or race, but rather the level of academic preparation. The present data indicate that neither gender nor race contributed significantly to persistence or college grades.

Astin (1975) found that employment was associated with higher rates of attrition, and full-time employment had a more detrimental effect than part-time employment. This finding was not validated in the present study in that employment status appeared to have no relationship to student success.

The type of institution was reported in the literature to be a strong predictor of student persistence (Astin, 1975). In this study no differences were expected nor were any found based on which college was attended, because all of the institutions were of the same type (community colleges).

Conclusion 3: Orientation courses are prevalent in North Carolina Community Colleges, and more colleges are adding the course to the curriculum.

There seems to be growing national concern that the freshman year must be revamped to "front load" support systems for new college entrants (Upcraft & Gardner, 1989). One outgrowth of this concern has been the proliferation of colleges offering orientation courses. One survey found that 78% of American colleges were offering a version of orientation courses (El-Khawas, 1984). Apparently North Carolina community colleges are following this trend. This study found that 54% of these colleges were offering a course in the spring, 1990. Of those not offering the course, 30% were planning to implement it in the near future. The spread of the course within the community college system may be due in part to the current emphasis on increasing institutional effectiveness.

Conclusion 4: The freshmen community college students that enrolled in orientation tended to recognize the value of an orientation course and would recommend the course to others.

The students' evaluations of the course were very encouraging. Not only did orientation improve student success, but the students also recognized the value of the course. Three-fourths of the students felt that the course enhanced their academic abilities, and they would recommend it to others. Some students gave the unsolicited suggestion that the course should be required. This student feedback supports the validity of orientation courses, that is, such courses seem to have face value.

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